VOL. 440 JOURNAL OF CHROMATOGRAPHY MAY 25, 1988

CONTENTS

HONOUR VOLUME ON THE OCCASION OF THE 80TH BIRTHDAY OF EDGAR LEDERER

Preface
by M. Lederer 1

Avant-propos. En hommage au Professeur Edgar Lederer: souvenirs chromatographiques 1950–1960
par M. Barbier (Gif-sur-Yvette, France) 5

Influence of the relative concentrations of two components of a binary mixture on their overloaded elution profiles
by S. Ghodbane and G. Guiochon (Knoxville and Oak Ridge, TN, U.S.A.) 9

Isolation and characterisation of intact steryl ferulates from seeds
by R. P. Evershed, N. Spooner, M. C. Prescott and L. J. Goad (Liverpool, U.K.) . . . 23

High-performance liquid chromatography of carotenoids from some marine shellfish
by B. Stancher, F. Zonta and L. G. Favretto (Trieste, Italy) 37

Imunoaffinity chromatography of fusicoccin
by M. Marra, A. Ballio and P. Aducci (Rome, Italy) 47

Chromatographic isolation of primary and secondary metabolites from plant cell cultures
by S. E. Manoilov, V. P. Komov, N. V. Kirillova, M. A. Strelkova, Yu. A. Samolin, L. S. Chernoborodova and L. A. Nicolaeva (Leningrad, U.S.S.R.) 53

High-performance liquid chromatographic determination of fomannoxin in European strains of *Heterobasidion annosum* (Fr.) Bref.
by D. M. X. Donnelly and M. Martin (Dublin, Ireland) and J. Polonsky (Gif-sur-Yvette, France) 65

Identification of dekamycin antibiotics
by T. D. Van, D. D. Khac, M. Fetizon and J.-C. Tabet (Palaiseau, France), Y. Le Beyec (Orsay, France) and T. C. Quyen (Hanoi, Viet-Nam) 71

Chromatographic purification and characterization of elicitors of necrosis on tobacco produced by incompatible *Phytophthora* species
by V. Billard and M. Bruneteau (Villeurbanne, France), Ph. Bonnet and P. Ricci (Antibes, France), J. C. Pernollet and J. C. Huet (Versailles, France), A. Vergne (Villeurbanne, France), G. Richard (Lyon, France) and G. Michel (Villeurbanne, France) 87

N-Acetylmuramyl-L-alanyl-D-isoglutamine stimulates the immune response of B cells. Use of fast protein liquid chromatography to purify a novel monokine involved in this effect
by V. Souvannavong and A. Adam (Orsay, France) 95

Neutrophil stimulating activity released by *Staphylococcus*-stimulated mononuclear leukocyte conditioned medium. Further characterization and partial purification
by A. Ferrante, E. J. Bates and M. Nandoskar (Adelaide, Australia) 105

Application of chromatographic methods to the analysis of macrophage factors induced by *Nocardia opaca* cell walls
by Y. Moroux and E. Boschetti (Villeneuve-la-Garenne, France), J.-P. Bouvet (Paris, France) and R. Barot-Ciorbaru (Orsay, France) 119

Fast protein liquid chromatography of lymphocyte blastogenesis inhibitory factor produced by the human macrophage-like cell line U937
by K. Sugimura, K. Tsukahara, Y. Ueda, K. Takeda, Y. Habu and I. Azuma (Sapporo, Japan) 131

Chromatographic and radioimmunological methods for the determination of 5'-deoxy-5'-methylthioadenosine in biological fluids
by F. Della Ragione, A. Oliva, V. Gragnaniello, M. Fioretti, A. Fioretti, L. F. Menna, V. Papparella and V. Zappia (Naples, Italy) 141

High-performance liquid chromatographic determination of a naturally occurring xylosyl thioether, 9-[5'-deoxy-5'(methylthio)-β-D-xylofuranosyl]adenine
by M. Porcelli, G. Cacciapuoti, A. Oliva and V. Zappia (Naples, Italy) 151

High-performance displacement chromatography of melanotropins and their derivatives
by G. Viscomi, S. Lande and Cs. Horváth (New Haven, CT, U.S.A.) 157

Adsorption chromatography on cellulose. II. Separations of aromatic amino acids, biogenic amines, alkaloids, dyes and phenols and determination of hydrophobic constants
by A. O. Kuhn and M. Lederer (Lausanne, Switzerland) 165

Complementary use of reversed-phase, normal-phase and chiral high-performance liquid chromatography for the study of the stereoisomers produced in decarboxylative alkylation of tartaric acid
by J.-P. Porziemsky, A. M. Krstulović and A. Wick (Paris, France) and D. H. R. Barton, C. Tachdjian, A. Gateau-Olesker and S. D. Gero (Gif-sur-Yvette, France) 183

Optical resolution of samples with weak interactions on chiral "brush-type" liquid chromatographic stationary phases
by R. R. Brügger, A. R. Marti, V. R. Meyer and H. Arm (Bern, Switzerland) 197

Resolution of α-substituted amino acid enantiomers by high-performance liquid chromatography after derivatization with a chiral adduct of *o*-phthalaldehyde. Application to glutamic acid analogues
by M. Maurs, F. Trigalo and R. Azerad (Paris, France) 209

Stereoselective determination of L-amino acids using column liquid chromatography with an enzymatic solid-phase reactor and chemiluminescence detection
by H. Jansen, U. A. Th. Brinkman and R. W. Frei (Amsterdam, The Netherlands) . . 217

Determination of methylated amino acids in human serum by high-performance liquid chromatography
by K. S. Park (Philadelphia, PA, U.S.A.), H. W. Lee and S.-Y. Hong (Kyunggi-Do, Korea) and S. Shin, S. Kim and W. K. Paik (Philadelphia, PA, U.S.A.) 225

High-performance liquid chromatography in protein sequence determinations
M. Castagnola, L. Cassiano, R. De Cristofaro, R. Landolfi, D. V. Rossetti and G. Battista Marini Bettolo (Rome, Italy) 231

Analysis of tryptamine at the femtomole level in tissue using negative ion chemical ionization gas chromatography–mass spectrometry
by D. A. Durden and A. A. Boulton (Saskatoon, Canada) 253

Chromatography, flow injection analysis and electrophoresis in computer-assisted comparative biochemistry: its application and possibilities in clinical research. Preliminary studies on Crohn's disease
by V. R. Villanueva and M. Mardon (Gif-sur-Yvette, France) 261

Interactions between ascorbic acid and linear and cyclized bile pigments. A thin-layer chromatographic study
M. Barbier (Gif-sur-Yvette, France) 275

High-performance liquid chromatographic analysis of oligosaccharides. I. Separation of an ion-exchange stationary phase of low cross-linking
by H. Derler, H. F. Hörmeyer and G. Bonn (Innsbruck, Austria) 281

Ion-exchange derivatives of Spheron. VI. Strongly basic derivatives
by O. Mikeš, Z. Hostomská and P. Štrop (Prague, Czechoslovakia), M. Smrž and S. Slováková (Brno, Czechoslovakia), P. Vrátný (Prague, Czechoslovakia), L'. Rexová-Benková (Bratislava, Czechoslovakia) and J. Kolář and J. Čoupek (Prague, Czechoslovakia) . . 287

High-performance adsorption chromatography of proteins on 2-μm spherical beads of hydroxyapatite
by S. Hjertén, J. Lindeberg and B. Shopova (Uppsala, Sweden) 305

Packing density of organyldimethylsiloxy-covered silica gel and hydrolytic stability of the coating
by G. Fóti, M. L. Belvito and E. sz. Kováts (Lausanne, Switzerland) 315

"Superdynamic" coating of the inner surface of a capillary column with a liquid stationary phase
by V. G. Berezkin and A. A. Korolev (Moscow, U.S.S.R.) 323

Demonstration of intermolecular and intramolecular hydrogen bonding by gas chromatographic measurements
by J. K. Haken and F. Abraham (Kensington, Australia) 329

1,2-Diaminobenzene derivatives for the determination of selenium by gas chromatography
A. F. Al-Attar and G. Nickless (Bristol, U.K.) 333

Several intermediate forms in the processing of rat lutropin subunits as shown by sodium dodecyl sulphate polyacrylamide gel electrophoresis
by A. Starzec, R. Counis and M. Jutisz (Gif-sur-Yvette, France) 353

Paper electrophoretic study of ion-pair formation. XVII. Influence of the enantiomeric purity of the sodium tartrate used as electrolyte
by S. Fanali (Rome, Italy), M. Lederer (Lausanne, Switzerland) and P. Masia and L. Ossicini (Rome, Italy) 361

Buffer isoelectric focusing revisited
by P. G. Righetti, M. Fazio and C. Tonani (Milan, Italy) 367

Secretion of proteins by *Bacillus subtilis* 168 grown in the presence of membrane active agents (alcohols)
by S. Baykousheva (Sofia, Bulgaria) 379

Plasmodium falciparum exoprotein stimulation of human T-lymphocytes unsensitized to malaria
by G. Jaureguiberry, W. Ogunkolade, E. Bailly, A. Rhodes-Feuillette, M. Agrapart and J.-J. Ballet (Paris, France) 385

Large-scale fractionation of S-form lipopolysaccharide from *Salmonella abortus equi*. Chemical and serological characterization of the fractions
by C. Galanos, B. Jiao, T. Komuro, M. A. Freudenberg and O. Lüderitz (Freiburg, F.R.G.) 397

Comparative susceptibility of a peptidoglycan monomer from *Brevibacterium divaricatum* and its anhydromuramyl analogue to hydrolysis with N-acetylmuramyl-L-alanine amidase. Isolation and characterization of anhydromuramyl-peptidoglycan monomer
by J. Tomašić and L. Sesartić (Zagreb, Yugoslavia), S. A. Martin (Cambridge, MA, U.S.A.) and Z. Valinger and B. Ladešić (Zagreb, Yugoslavia) 405

Synthesis of [16,16,19-$^2H_3$; 19-^{3}H]19-oxo-androst-4-ene-3,17-dione
by V. C. O. Njar, H. R. W. Dharmaratne and E. Caspi (Shrewsbury, MA, U.S.A.) . . 415

Survey of the folding pathway of a two-domain protein phosphoglycerate kinase
by J. M. Yon, J.-M. Betton, M. Desmadril, A. Mitraki, P. Minard, S. Gaillard, N. Ballery and D. Missiakas (Orsay, France) 421

Synthetic peptide substrates as models to study a pro-ocytocin/neurophysin converting enzyme
by C. Créminon, M. Rholam, H. Boussetta, N. Marrakchi and P. Cohen (Paris, France) 439

Formal total synthesis of rosefuran and eldanolide
by E. Wenkert, A. J. Marsaioli and P. D. R. Moeller (La Jolla, CA, U.S.A.) 449

Liposomally entrapped adenosine triphosphate. Improved efficiency against experimental brain ischaemia in the rat
by A. Laham (Chatenay-Malabry, France), N. Claperon and J. J. Durussel (Paris, France), E. Fattal (Chatenay-Malabry, France), J. Delattre (Paris, France), F. Puisieux and P. Couvreur (Chatenay-Malabry, France) and P. Rossignol (Paris, France) 455

Inoculation of BALB/c mice against *Leishmania major* infection with *Leishmania*-derived antigens isolated by gel filtration
by B. W. Ogunkolade, L. Monjour, I. Vouldoukis, A. Rhodes-Feuillette and D. Frommel (Paris, France) 459

Entamoeba histolytica antigens as possible vaccinogens? A short review
by S. Ahmad, H. M. Khan, A. A. Mahdi, H. Kumar and N. Khan (Aligarh, India) . . 467

Biomedical applications of chromatographic fraction containing trehalose dimycolate in squalane emulsion (Review)
by K. N. Masihi, W. Lange and M. Özel (Berlin, F.R.G.) 473

Investigation of the lipids of saprophytic mycobacteria in the U.S.S.R. (Review)
by T. V. Koronelli (Moscow, U.S.S.R.) 479

Concerning hydrolysis of mycolate esters, of phthiocerol dimycocerosates and of related mycobacterial lipids: an anecdotal account
by M. B. Goren, K. R. Dhariwal and I. D. Jenkins (Denver, CO, U.S.A.) 487

The vitamin K dependent reaction
by B. C. Johnson (Oklahoma City, OK, U.S.A.) 499

Tswett's letters to Claparède
by I. M. Hais (Hradec Králové, Czechoslovakia) 509

Author Index 533

In articles with more than one author, the name of the author to whom correspondence should be addressed is indicated in the article heading by a 6-pointed asterisk (*)